

REMARKS

The Examiner is thanked for the thorough review and consideration of the present application. The non-final Office Action dated May 6, 2004 has been received and its contents carefully reviewed.

By this Response, claims 1 and 10 have been amended. No new matter has been added. Claims 1-7 and 9-20 are pending with claims 4, 7, 9 and 16-20 being withdrawn from consideration. Reconsideration and withdrawal of the objection and rejections based upon the above amendments and the following remarks are requested.

In the Office Action, claims 1-3, 5 and 6 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Office Action rejected claim 1 because of the newly added limitation "to maintain an electric field generated between the common electrodes and the data electrodes in the same direction as the rubbing direction". Applicants disagree with the rejection, but have amended claim 1 to expedite prosecution of the application. Reconsideration and withdrawal of the rejection are requested.

In the Office Action, claims 10-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully disagree with the rejection, but have amended independent claim 10 to expedite prosecution of the application. Accordingly, reconsideration and withdrawal of the rejection of claims 10-15 are respectfully requested.

Claims 1, 2, 5, 6 and 10-12 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6, 341, 003, issued to Ashizawa et al. (hereafter "Ashizawa"). Applicants traverse the rejection because Ashizawa fails to teach or suggest each and every feature recited in the claims of the present application. For example, Ashizawa fails to teach or suggest an in-plane switching mode LCD device:

"wherein the data electrodes are connected with the thin film transistor at one side and the data electrodes overlap the common line at a minimum area so as to maintain an electric field generated between the common electrodes and the data electrodes, wherein edges of the data electrodes in the minimum area are located on an inner portion of the common line and edges of the data electrodes located away from the common line are rounded and include

portions that are non-overlapping with the common line”, as recited in independent claim 1.

Applicants note Ashizawa discloses an IPS-type LCD in FIGS. 39, 40(A) and 40(B); however, Ashizawa fails to teach or suggest an in-plane switching mode LCD device having each of the features recited in independent claim 1. Because Ashizawa fails to teach or suggest each of the features recited in independent claim 1, claim 1 and its dependent claims 2, 5 and 6 are allowable over Ashizawa.

Applicant further traverse the rejection because Ashizawa fails to teach or suggest an in-plane switching mode LCD device having:

“a plurality of data electrodes parallel to the common electrodes, wherein first ends of the data electrodes are connected to the drain electrode of said thin film transistor, and second ends of the data electrodes are located on an inner portion of the common line, wherein edges of the data electrodes located away from the common line are rounded and include portions that are non-overlapping with the common line”, as recited in independent claim 10.

Because Ashizawa fails to teach or suggest at least these features recited in independent claim 10, claim 10 and its dependent claims 11-12 are allowable over Ashizawa.

Reconsideration and withdrawal of the rejection of claims 1, 2, 5, 6 and 10-12 are respectfully requested.

Claims 1-3, 5, 6 and 10-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,281,958, issued to Nakajima in view of Applicants’ Related Art (hereafter “Related Art”). Applicants respectfully traverse the rejection because neither Nakajima nor the Related Art, analyzed alone or in any combination, teaches or suggests an in-plane switching liquid crystal display device that includes, among other features:

“the data electrodes are connected with the thin film transistor at one side and the data electrodes overlap the common line at a minimum area so as to maintain an electric field generated between the common electrodes, wherein edges of the data electrodes in the minimum area are located on an inner portion of the common line and edges of the data electrodes located away from the common line are rounded and include portions that are non-overlapping with the common line”, as recited in independent claim 1.

The Office Action concedes that Nakajima fails to teach “the data electrodes 40 located away from the common line 32 (as shown in Fig. 3) are rounded” and “one side of the first data electrode” connected with the transistor “and also over the common line”. To remedy the deficient teachings of Nakajima, the Office Action relies upon the Related Art. However, Applicants respectfully submit the Related Art fails to remedy the deficient teachings of Nakajima. For example, as illustrated in FIGs. 3A and 3B of the present specification, the Related Art fails to teach or suggest the structural relationship recited in claim 1 of the present application. Specifically, the Related Art fails to teach or suggest “edges of the data electrodes in the minimum area are located on an inner portion of the common line and edges of the data electrodes located away from the common line are rounded and include portions that are non-overlapping” as recited in independent claim 1. Because the Related Art fails to teach at least this feature of claim 1, the Related Art does not remedy the deficiencies of Nakajima. Accordingly, independent claim 1 and its dependent claims 2-3 and 5-6 are allowable over Nakajima and the Related Art.

Applicants further traverse the rejection because neither Nakajima nor the Related Art, analyzed alone or in any combination, teaches or suggests an in-plane switching liquid crystal display device that includes,

“a plurality of data electrodes parallel to the common electrodes, wherein first ends of the data electrodes are connected to the drain electrode of said thin film transistor, and second ends of the data electrodes are located on an inner portion of the common line, wherein edges of the data electrodes located away from the common line are rounded and include portions that are non-overlapping with the common line”, as recited in independent claim 10.

The Office Action relies upon the Related Art to remedy the deficiencies of Nakajima. However, Applicants submit the Related Art fails to teach or suggest “second ends of the data electrodes are located on an inner portion of the common line, wherein edges of the data electrodes located away from the common line are rounded and include portions that are non-overlapping with the common line”, as recited in independent claim 10.

Application No.: 09/892,476
Amendment dated August 4, 2004
Reply to Office Action dated May 6, 2004

Docket No.: 8733.481.00-US

Because the Related Art fails to teach at least this feature of claims 10, the Related Art does not remedy the deficiencies of Nakajima. Accordingly, independent claim 10 and its dependent claims 11-15 are allowable over Nakajima and the Related Art.

Reconsideration and withdrawal of the rejection of claims 1-3, 5-6 and 10-15 are requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding objection and rejections of the claims and to pass this application to issue. If the Examiner deems that a telephone conversation would further the prosecution of this application, the Examiner is invited to call the undersigned at (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: August 4, 2004

Respectfully submitted,

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